ENVIRONMENTAL CHEMISTS

Date of Report: March 6, 1997 Date Received: February 13, 1997

Project: Metro Self Monitor, PO #M56206 Date Samples Extracted: February 26, 1997 Date Extracts Analyzed: March 4, 1997

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID		Chromium	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M56206		0.47	0.48	0.48	<0.05
					ale implica
Method Blan	k	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: March 6, 1997 Date Received: February 13, 1997

Project: Metro Self Monitor, PO #M56206

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 75880 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.47	0.48	2	0-20
Copper	mg/L (ppm)	0.48	0.50	4	0-20
Nickel	mg/L (ppm)	0.48	0.49	2	0-20
Zinc	mg/L (ppm)	< 0.05	<0.05	nm	0-20

Laboratory Code: 75880 (Matrix Spike)

	Reporting	Spike	Sample	%.	Recovery	Acceptance	Relative e Percent
Analyte:	Units	Level	Result	MS	MSD	<u>Criteria</u>	Difference
		111					
Chromium	mg/L (ppm)	5	0.47	94	93	80-120	- 10 1 H
Copper	mg/L (ppm)	5	0.48	93	91	80-120	2
Nickel	mg/L (ppm)	10	0.48	92	91	80-120	1
Zinc	mg/L (ppm)	5	< 0.05	95	94	80-120	1

Laboratory Code: Spike Blank

	Reporting	Spike		covery	Acceptance	
Analyte:	Units	Level	MS	MSD	<u>Criteria</u>	<u>Difference</u>
	And the second					
Chromium	mg/L (ppm)	5	93	92	80-120	1 1
Copper	mg/L (ppm)	5	89	89	80-120	0
Nickel	mg/L (ppm)	10	90	91	80-120	1
Zinc	mg/L (ppm)	5	90	94	80-120	4
11 4 s. 1 1 1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		的第三人称形式 化二甲基甲基二甲基甲基二甲基甲基二甲基甲基二甲基甲基二甲基甲基二甲基甲基二甲基	The second second	Beg # 2 2 12 12 1		- x No.74 kg

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119 (206) 285-8282

FORMS/COC

SAMPLE CHAIN OF CUSTODY

2-13-97 2-25 PM

Address 178	An Carl	en Worl 98134	es	Contac	ei <u>6</u>	Theres Theres		
City, State, Zip Some Phone # (206) 3	82-8379	10/39		Date	2 -	-13-97		
							And the second s	
SITE NO.			IECT NAME			PURCHASE ORDER	<u> </u>	
7238	38 METTED SELF MONITOR M 56206							
SAMPLERS (signature) PROJECT LOCATION								
×				,	32	00 6th Au		
REMARKS						PLE DISPOSAL INFOR		
	2					Dispose after 30 days		
						Return Samples		
	Date/Time	Type of	# of	Lab		Call for Instructions Analyses	The state of the s	
\ Sample #	> Sampled	Sample	Jars	Sample	#	Requested		
m 56206	2/3/5		1	1588		Ca con	2	

			-					
		_						
				 				
•								
						***************************************	Index agreement a residence on the state of the control of the state of	
				 				
				-				
OLGALIEUDE.		DOWNER WAS A						
SIGNATURE Relingatished by:		PRINT NAME		COMPA		Date	Time	
LoyLann	رعا			ACU	'	3/13/92		
Received by	MAN	WEL MAR	71 F	-LBI		2/13/97	1:50 0	
clinquished by:								
Received by:								
L							1	

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Beth M. Albertson, M.S. Bradley T. Benson Kelley D. Wilt 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

March 6, 1997

INVOICE # 97ACU0306-2 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M56206: Results of testing requested by Gerry Thompson, Project Manager for material submitted on February 13, 1997.

FEDERAL TAX ID #(b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Beth M. Albertson, M.S. Bradley T. Benson Kelley D. Wilt 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

March 6, 1997

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 13, 1997 from your Metro Self Monitor, PO #M56206 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson Chemist

keh

Enclosures ACU0306R.DOC